

Questions for the Record (Majority)

U.S. Senate Committee on Commerce, Science, and Transportation

“Nomination Hearing of Jennifer Homendy to be Chair of the National Transportation Safety Board, Karen Hedlund to be a Member of the Surface Transportation Board, Dr. Robert Hampshire to be Assistant Secretary for Research and Technology for the Department of Transportation, and Carol (“Annie”) Petsonk to be Assistant Secretary for Aviation and International Affairs for the Department of Transportation”

June 24, 2021

Question for the Record from Chair Cantwell to Dr. Robert Hampshire to be Assistant Secretary for Research and Technology for the Department of Transportation

Workforce Development and Training. Transportation and transportation-related industries employ over 13 million people in the United States. The transportation workforce is absolutely critical for moving goods and people across the country, and driving our economy to be competitive globally. However, when that workforce isn’t appropriately trained the consequences can be dire – a lack of training and situational awareness was one of the contributing factors to the 2017 DuPont derailment, and we have seen similar issues in the aviation context time and time again.

Question 1. How is the Department of Transportation ensuring that we have a diverse and skilled workforce across the transportation sector?

***Answer.* A diverse and inclusive workforce contributes to our ability to better serve the American public and supports our vision for a safe, innovation and equitable transportation systems. The Department will work in collaboration with state, local, Tribal, and territorial governments as well as transportation equity organizations and underrepresented communities, to create a more diverse transportation workforce that better represents our nation. These efforts will include analyzing trends specific to recruitment, retention and promotion of underrepresented groups, listening to and engaging with Employee Resource Groups as the Department establishes new workforce development initiatives, and training managers and holding them accountable to our civil rights and equity commitments.**

Automation. Technology and automation are wonderful tools which supplement, enhance, and magnify the ability of humans to manage complex machines. However, there is a risk that over-reliance on automation can lead to a deterioration of skills and engagement. And as automation plays an increasingly larger role across all of our transportation systems, it is paramount that our workforce – both on the industry and the regulator side – is appropriately trained up to ensure that automation does not compound existing safety issues.

June 29, 2021

Question 2. What are your views about the potential for over-reliance on automation and how can we best manage this apparent downside to the benefits of automation?

Answer. **We know that automation is a part of the future of this nation's transportation system. Autonomous operations can make our transportation system safer and more efficient but need to be designed and deployed with travelers, workers and cybersecurity in mind. I am eager to work with you and your colleagues in Congress to ensure that the Federal government is leading the way on ensuring safe autonomous vehicle operations nationwide. With my Departmental colleagues, I will work with industry, American workers, safety organizations, environmental groups, and other stakeholders to determine how to create American jobs and advance American technological leadership through this industry.**

Question 3. What changes do we need to make to ensure that both industry and regulators are appropriately trained on issues facing the transportation sector today and in the future?

Answer. **Transportation safety training, and other related training, is important to creating a safer, more efficient transportation system. Some of our training is delivered directly, and much through grant programs, in support of regulatory requirements. As part of regulatory agenda formulation we take into account available agency resources, priority safety needs, statutory requirements for actions requiring rulemaking, recommendations from the National Transportation Safety Board, and other agency needs, including training. I look forward to working with Congress to ensure there are sufficient resources for training.**

Reducing Emissions. The transportation sector already accounts for 29 percent of the greenhouse gas emissions in the United States, the largest source of emissions of any sector. With freight movement expected to increase significantly over the next decade, it is critical that the Department's research, policies, and actions support the transportation sector in moving toward net-zero carbon emissions.

Question 4. How is the Department helping to develop and commercialize transportation and infrastructure technologies to combat climate change and reduce our infrastructure's impact on the environment?

Answer. **The Department has reconstituted the Climate Change Center and plans to increase its responsibilities and capacity. In the next five years, the Department intends to with external stakeholders including other federal agencies to:**

- **develop department-wide policies and strategies to reduce greenhouse gas (GHG) emissions and make our transportation systems more resilient;**
- **address the economic and environmental impacts of climate change on the underserved, low income, and tribal nations;**
- **explore future transportation technologies that impact climate change; and**

- **establish a department-wide research program to measure and reduce transportation-related GHG emissions and mitigate climate change impacts, in partnership with other Federal agencies, academia and the private sector.**